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09/895,944	06/29/2001	Lawrence Bergman	YOR920010406US1	9336
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EXAMINER				
MILEF, ELDA G				
ART UNIT		PAPER NUMBER		
3692				
NOTIFICATION DATE		DELIVERY MODE		
07/09/2008		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Office Action Summary

Application No.

09/895,944

Applicant(s)

BERGMAN ET AL.

Examiner

Elda Milef

Art Unit

3692

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No./Mail Date: _____

DETAILED ACTION

Status of the Claims

1. This office action is in response to the amendments submitted by the applicants on 5/5/2008.

- Claims 1, 4, 6,8,9, 16, 20, 21, 23, 25, 33,34, 36,38 are amended.
- Claims 1-45 are pending in the application.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/5/2008 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter

which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, 20, 33, the Examiner is not convinced that the applicant had possession of the invention as claimed at the time of the filing of this application. The applicant cites that support for non-textual information as recited in the claims can be found on page 23, lines 4-12 of the specification. The sections of the specification disclose a substitution process; methods developed to learn Bayesian networks from data, a request for locations, evaluations of a risk model, inference models, social utility. The applicant makes reference to page 7, line 17, to page 8, line 13; page 10, line 19, to page 13, line 10; page 17, line 9, to page 19, line 19; and page 20, line 14, to page 24, line 16. The Examiner could not find support for how a request comprises non-textual information. There is no mention in the specification of how a request comprises non-textual information and analyzing the request and the non-textual information to create additional information within the context of enabling an electronic information marketplace as claimed by the applicant.

Claims 2-19, 21-32, 34-45 are rejected because of their dependency to the rejected claims.

4. Claims 1-45 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to

which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Re claims 1, 20 and 33: The specification does not provide support to enable one skilled in the art to use the invention. The applicant claims that a request comprises non-textual information and refers to specific pages of the specification as support as indicated in the Remarks dated 5/5/2008, pp. 11-12. The specification however, does not disclose how for example, "a basic outline for a house" as referred to by the applicant is non-textual. Another example referred to by the applicant as a teaching for non-textual information is on page 23 lines 4-12 in the specification, in particular "request for locations". The Examiner could not find support in the specification explaining how the "request for locations" is non-textual information.

Claims 2-19, 21-32, 34-45 are rejected because of their dependency to the rejected claims.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claims 1, 20, and 33 are confusing. The claims recite collecting a request from a buyer for a requested information good. There is no prior request for an information good in the claims. Is the applicant trying to claim the following: --collecting a request from a buyer for an information good--?
- Claims 1, 20, and 33 recite the limitation "said request" in line 7. There is insufficient antecedent basis for this limitation in the claims. It is not clear what "said request" is referring to. Is the request for purchase submitted by the buyer non-textual or is the information good non-textual?

Claims 2-19, 21-32, 34-45 are rejected because of their dependency to the rejected claims.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding claims 1-19, as best understood, it appears that the claimed method steps could simply be performed by mental process alone and are not statutory. The following passage comes from *In re Comiskey*, 499 F.3d 1365, 84 USPQ2d 1670 (Fed. Cir. Sep. 20, 2007):

It is thus clear that the present statute does not allow patents to be issued on particular business systems—such as a particular type of arbitration—that depend entirely on the use of mental processes. In other words, the patent statute does not allow patents on particular systems that depend for their operation on human intelligence alone, a field of endeavor that both the framers

and Congress intended to be beyond the reach of patentable subject matter. Thus, it is established that the application of human intelligence to the solution of practical problems is not in and of itself patentable.

Furthermore, in order for a method to be considered a "process" under § 101, a claimed process must either: (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials). *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972). If neither of these requirements is met by the claim, the method is not a patent eligible process under §101 and is non-statutory subject matter.

Independent claim 1 is directed towards steps of "collecting", "analyzing", and "matching". Since the claims are directed to a process without including another statutory class of invention (i.e. machine, manufacture, or composition of matter), these claims fall within the scope of human intelligence alone, and are non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-7, 10, 14, 20-24,26, 30, 33-37, 39, 43 are rejected under 35 U.S.C. 102(e) as being anticipated by Finley et al. (hereinafter Finley, US Patent No. 7,257,536).

Re claims 1-3, 14: Finley disclose:

collecting a request from a buyer for a requested information good, wherein said request comprises non-textual information (col. 8 lines 6-22; col. 12 lines 6-12);

analyzing the non-textual information to create additional information from the request (col. 9 lines 45-62);

collecting one or more offered information goods from one or more sellers(col. 10 lines 37-40);

analyzing each of the offered information goods to create additional information from the information good(col. 10 lines 40-50); and

matching the request with at least one of the offered information goods by matching the additional information from the request with the additional information from the at least one information good (col. 10 lines 1-10); wherein the step of matching further comprises selecting at least one offered information good as a best match (col. 10 lines 40-43); wherein each information good can be distributed in digital form (col. 10 lines 55-59).

Re claims 4-5: Finley disclose wherein the step of analyzing the non-textual information request further comprises the step of analyzing the request to create annotations, and wherein the step of analyzing each of the one or more offered information goods further comprises the step of analyzing each of the one or more

offered information goods to create annotations (col. 11 lines 19-42); wherein each of the annotations comprises summary information ("breakdown of costs, additional information" -col. 11 lines 19-42).

Re claims 6-7: Finley disclose wherein the step of analyzing the non-textual information further comprises the step of creating at least one inference from the request (col. 9 lines 12-14); and wherein the step of analyzing each of the one or more offered information goods further comprises the step of creating at least one inference from each of the offered information goods (col. 10).

Re claim 10: Finley disclose wherein each of the offered goods has a price associated with the good and wherein the step of matching further comprises dynamically determining prices of the offered goods (col. 10 lines 40-45).

Re claims 20-24, 26, 30: Further a system would have been necessary to perform the method of previously rejected claims 1, 4-7, 10, 14 respectively, and are therefore rejected using the same art and rationale.

Re claims 33-37, 39, 43: Further an article of manufacture would have been necessary to perform the method of previously rejected claims 1, 4-7, 10, 14 respectively, and are therefore rejected using the same art and rationale.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 8,9, 11-13, 16, 17, 25, 27-29, 38, 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley in view of Haddawy (Haddawy, Peter. *An Overview of Some Recent Developments in Bayesian Problem-Solving Techniques*. AI Magazine. La Canada: Summer 1999, Vol. 20, Iss. 2; pg. 11, 9 pgs.)

Re claims 8, 9: Finley do not disclose wherein the step of analyzing the request further comprises the step of accessing at least one request knowledge model, and wherein the step of analyzing each of the offered information goods further comprises the step of accessing at least one offered knowledge model. Haddawy teaches knowledge based model construction using Bayesian networks for use in practical applications such as information filtering-see pp. 1-5. It would have been obvious to one having ordinary skill in the art to include in the audio request interaction system of Finley et al. the ability to use Bayesian modeling and problem solving in information filtering in order to facilitate the analysis of data to provide the user with an appropriate course of action that will maximize utility as taught by Haddawy since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of

ordinary skill in the art would have recognized that the results of the combination were predictable.

Re claim 11, 13: Although Finley do disclose dynamically determining prices in col. 10 lines 40-45, Finley do not specifically disclose creating an influence diagram comprising node and arc, each arc connecting one node with another node; and dynamically determining prices comprises the step of maximizing utility. Haddawy however, teaches ("Influence diagrams (Howard and Matheson 1984) are a generalization of Bayesian networks for analyzing courses of action. In addition to chance nodes, they contain decision and value nodes..."-see p. 2 para. 3 and ("The optimal act is the one that maximizes expected utility..."-see p. 1 para. 3. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finley to include using an influence diagram to analyze a course of action as taught by Haddawy in order to maximize expected profits for the seller and maximize utility for the buyer and seller.

Re claim 12: Although Finley disclose the step of dynamically determining prices, Finley do not specifically disclose the step of updating expectations and probabilities through Bayesian updating selecting from a group consisting of linear Bayes updating and updating with decisions. Haddawy however, teaches ("Influence diagrams (Howard and Matheson 1984) are a generalization of Bayesian networks for analyzing courses of action. In addition to chance nodes, they contain decision and value nodes. They share all the benefits of Bayesian networks."). It would have been obvious to one having ordinary skill in the art at the time the invention was made to

modify Finley to include using Bayesian networks for analyzing courses of action and determining probability of random variables as taught by Haddawy in order to maximize expected profits for the seller and maximize utility for the buyer.

Re claim 16: Finley disclose the steps of analyzing the request and the step of analyzing each of the offered information goods as in claims 4 and 5 above, and matching comprises comparing the request, annotations and offered information goods and annotations as in claims 4 and 5 supra.

Haddawy further discloses using inference in Bayesian networks to determine an optimal act that maximizes expected utility. Haddawy teaches inference techniques to analyze data in order to aid in decision making-see pp. 1-6. It would be obvious to use the inference techniques in Bayesian networks to infer a user's goals and needs as taught by Haddawy in order to maximize profit for seller and to minimize cost for the buyer. It would have been obvious to one having ordinary skill at the time the invention was made to modify Finley to include inference techniques to analyze data as taught by Haddawy in order to maximize utility for both the buyer and seller.

Re claim 17 has similar limitations found in claim 7 above, therefore is rejected by the same rationale.

Re claims 25, 27-29: Further a system would have been necessary to perform the method of previously rejected claims 8, 11-13 respectively, and are therefore rejected using the same art and rationale.

Re claims 38, 40-42: Further an article of manufacture would have been necessary to perform the method of previously rejected claims 8, 11-13 respectively, and are therefore rejected using the same art and rationale.

9. Claims 15, 31, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley in view of Ogilvie (US Patent No. 6,343,738).

Re claims 15, 31, 44: Finley do not disclose exchanging the at least one offered information good and the requested information good, whereby the buyer has the at least one offered information good and one of the sellers has the requested information good after the exchange. Ogilvie however, teaches a method, system, and article of manufacture wherein the buyer and seller each provide the other with digital goods. (cols. 14-15). It would have been obvious to one having ordinary skill in the art to include in the electronically initiated consumer sales transaction system of Finley the ability to exchange digital goods for digital goods as taught by Ogilvie since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

10. Claims 18, 19, 32,45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley in view of Goldberg et al.(hereinafter Goldberg, US Patent No. 6,985,885).

Re claim 18: Finley disclose the trading mechanisms consisting of fixed-price (col. 10 lines 37-50), Finley do not specifically disclose auction, price discrimination, and subscription. Goldberg, however teaches auction and price discrimination-see cols. 3-4; col. 12 lines 27-41. Official notice is taken that it is old and well known in the art of e-commerce that subscription is a method of selling information goods such as online subscriptions to Consumer Report magazine. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finley to include various pricing techniques, and subscription pricing as was taught by Goldberg and is old and well known in the art in order to give the sellers options in pricing goods that maximize the seller's profit potential.

Re claim 19: Finley do not disclose the step of decomposing an offering of one of the offered information goods, and wherein the step of matching further comprises the step of comparing decompositions of the one offered information good with the request and the additional information from the request. Goldberg however, teaches ("the vendor could capitalize on consumer price discrimination by offering a modified form of the goods which would be less appealing to consumers who place with utility value on the item, but which would still be appealing to consumers who place a low utility value on the item. For example, the vendor could create a version of the goods that did not include some of the features or functions valued by the high-end customers. The vendor could then hold separate auctions for each class of goods, setting a reserve price on the high-end version of the goods, the reserve price being greater than the utility values exhibited by the consumers of the low-end version.

Thus, the use of a stable auction mechanism enables the vendor to accurately observe market distributions and to adapt in an optimal fashion.”)-see col. 12 lines 27-41. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Finley to include modifying products to create versions of the digital good that do not have all the components offered to high-end consumers as taught by Goldberg in order to attract consumers who would not want to pay the high price associated with the more expensive version of the good.

Re claim 32: Further a system would have been necessary to perform the method of previously rejected claim 19 and is rejected using the same art and rationale.

Re claim 45: Further an article of manufacture would have been necessary to perform the method of previously rejected claim 19 and is rejected using the same art and rationale.

Response to Arguments

11. Applicant's arguments filed 5/5/2008 have been fully considered but they are not persuasive.

In response to the argument that the specification teaches that a request can comprise information that is not in a textual format, please refer to the 112 first paragraph above. Furthermore, the specification does not provide the information necessary for the Examiner to gain an understanding of a request being "non-textual." The specification does not offer support for the steps involved in the request being non-textual.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US Patent 5,991,737 (Chen)-cited for a consumer transmitter device configured to transmit an order to an order processor.

US PG Pub. No. 2003/0097338 (Mankovich et al.)-cited for a method and system for purchasing content related material.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elda Milef whose telephone number is (571)272-8124. The examiner can normally be reached on Monday -Friday 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Abdi can be reached on (571)272-6702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kambiz Abdi/
Supervisory Patent Examiner, Art Unit 3692

Elda Milef
Examiner
Art Unit 3692